



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,507	10/16/2003	Hideki Asao	243993US2	5081

22850 7590 01/19/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

GLENN, KIMBERLY E

ART UNIT	PAPER NUMBER
----------	--------------

2817

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,507

Applicant(s)

ASAO ET AL.

Examiner

Kimberly E Glenn

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4 is/are rejected.
- 7) ☒ Claim(s) 2,3,5 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/16/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

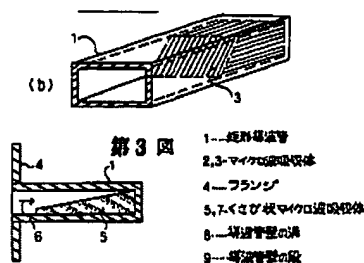
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukui JP 62072202A in view of Tomonaga US Patent 3,951,904.

Fukui discloses a microwave terminating set comprising of a waveguide having a rectangular opening, a terminating internal wall, first and second internal walls opposite which make up the shorter sides of the waveguide and third and fourth internal walls which make up the longer sides of the waveguide. The waveguide further includes a microwave absorbing body 7 (wave absorber). The microwave absorbing body is provided against the terminating internal wall and the surface of the absorbing body having the largest rectangular area is on the third internal wall.



- 19 -

Thus, Fukui is shown to teach all the limitation of the claim with the exception of the microwave absorbing body (wave absorber) having a parallelepiped shaped.

Tomonaga discloses in figures 1 and 2, a wave absorbers having taper and a rectangular (parallelepiped) shape.

One of ordinary skill in the art would have found it obvious to replace the taper absorbing body of Fukui with the rectangular shaped wave absorber as taught by Tomonage. Tomonage shows that the taper and the rectangular absorber are equivalent structure known in the art. The motivation for this modification would have been to provide the art recognized equivalent substitution.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Praba et al US Patent 4,906,952 in view of Fukui JP 62072202A in view of Tomonaga US Patent 3,951,904.

Praba et al disclose a waveguide assemblage comprises of directional coupler and a waveguide termination.

Thus, Praba et al is shown teach all the limitation of the claim with the exception of the waveguide termination comprising a waveguide portion having a rectangular opening in a plane perpendicular to a radio-wave propagation direction, said waveguide portion having one open end in the radio-wave propagation direction and the other end closed by a terminating metal internal wall, said waveguide portion having a radio-wave propagation space surrounded by a first metal internal wall and a second metal internal wall opposite thereto which include the shorter sides of the rectangular opening and which are parallel to a radio-wave electric field, and a third metal internal wall and a fourth metal internal wall opposite thereto which include the longer sides of the rectangular opening and which are perpendicular to the radio-wave electric field; and an

electromagnetic wave absorber whose exterior shape parallelepiped, said electromagnetic wave absorber having a rectangular rear-end surface which is positioned at predetermined distance from the terminating metal internal wall and parallel to the terminating metal internal wall or is provided against the terminating metal internal wall, the surface of said electromagnetic wave absorber, which has the largest rectangular area, being on one of the third metal internal wall and the fourth metal internal wall.

Fukui discloses a microwave terminating set comprising of a waveguide having a rectangular opening, a terminating internal wall, first and second internal walls opposite which make up the shorter sides of the waveguide and third and fourth internal walls which make up the longer sides of the waveguide. The waveguide further includes a microwave absorbing body 7 (wave absorber). The microwave absorbing body is provided against the terminating internal wall and the surface of the absorbing body having the largest rectangular area is on the third internal wall.

Thus, Fukui is shown to teach all the limitation of the claim with the exception of the microwave absorbing body (wave absorber) having a parallelepiped shaped.

Tomonaga discloses in figures 1 and 2, a wave absorbers having taper and a rectangular (parallelepiped) shape.

One of ordinary skill in the art would have found it obvious to replace the taper absorbing body of Fukui with the rectangular shaped wave absorber as taught by Tomonaga. Tomonaga shows that the taper and the rectangular absorber are

equivalent structure known in the art. The motivation for this modification would have been to provide the art recognized equivalent substitution.

One of ordinary skill in the art would have found it obvious to replace the waveguide termination of Praba et al with waveguide termination set as taught by Fukui in combination with Tomonage since examiner takes notice of the equivalence of the waveguide termination circuit of Praba et al and the waveguide terminating set of Fukui for their use in the transmission line art and the selection of any of these known equivalents to provide a means of absorbing electromagnetic waves would be within the level of ordinary skill in the art.

Allowable Subject Matter

Claims 2, 3, 5, 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Tillotson US Patent 2,866,949, Walker US Patent 2,722,661, Crowe US Patent 2,937,346, Kunio et al US Patent 3,581,245, Naito et al US Patent 5,276,448, Shingyoji US Patent 5,523,727 Kanitani et al JP360210003A, Terada JP357041005A, Ishino et al JP355118201A and Kato JP353113456A.

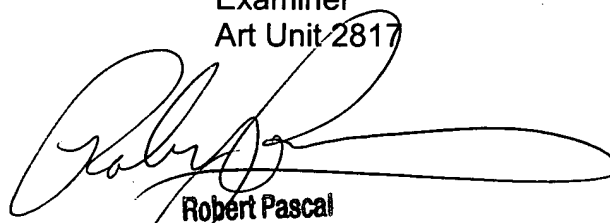
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

keg

Kimberly E Glenn
Examiner
Art Unit 2817



Robert Pascal
Supervisory Patent Examiner
Technology Center 2800